

WHAT IS CLAIMED IS:

1. An elastomeric adhesive composition, comprising:
a base polymer; and
a high softening point tackifier resin having a softening point of about 80 degrees Celsius or greater, and a viscosity of about 1500 cps or greater at 182 degrees Celsius;
wherein the elastomeric adhesive composition has a viscosity between about 100,000 and about 500,000 cps at between about 149 and about 177 degrees Celsius.
2. The composition of Claim 1, wherein the base polymer is present in the composition in an amount between about 50% and about 75% by weight.
3. The composition of Claim 1, wherein the base polymer comprises a styrene content of between about 10% and about 45% by weight.
4. The composition of Claim 1, wherein the base polymer comprises at least one of the group consisting of polystyrene-polyethylene-polypropylene-polystyrene (SEPS) block copolymer, styrene-isoprene-styrene (SIS) block copolymer, styrene-butadiene-styrene (SBS) block copolymer, styrene-ethylene-butylene-styrene (SEBS) block copolymer, ethylene-propylene-diene (EPDM) copolymers, thermoplastic polyurethane, and combinations thereof.
5. The composition of Claim 1, wherein the high softening point tackifier is present in the composition in an amount between about 20% and about 40% by weight.
6. The composition of Claim 1, wherein the high softening point tackifier comprises at least one type of hydrocarbon selected from the group consisting of petroleum distillates, rosin, rosin esters, polyterpenes derived from wood, polyterpenes derived from synthetic chemicals, and combinations thereof.

7. The composition of Claim 1, further comprising a low softening point additive having a softening point of about 60 degrees Celsius or less and a viscosity of about 1000 cps or less at 182 degrees Celsius, present in an amount between about 0% and about 20% by weight.

8. The composition of Claim 1, wherein the composition can be processed at about 191 degrees Celsius or lower.

9. The composition of Claim 1, wherein the composition is formed as at least one of the group consisting of: a plurality of extruded strands, an extruded film, a foam, a plurality of beads, and combinations thereof.

10. The composition of Claim 1, wherein the composition is formed as a combination of a plurality of extruded strands and an extruded film.

11. An elastomeric composite laminate, comprising:
at least one facing sheet; and
an elastomeric adhesive composition self-adhered to the at least one facing sheet, the elastomeric adhesive composition including a base polymer and a high softening point tackifier resin having a softening point of about 80 degrees Celsius or greater and a viscosity of about 1500 cps or greater at 182 degrees Celsius, wherein the elastomeric adhesive composition has a viscosity between about 100,000 and about 500,000 cps at between about 149 and about 177 degrees Celsius.

12. The elastomeric composite laminate of Claim 11, wherein the at least one facing sheet comprises a nonwoven web selected from a spunbond web, a meltblown web, and combinations thereof.

13. The elastomeric composite laminate of Claim 11, wherein the at least one facing sheet comprises a film.

14. The elastomeric composite laminate of Claim 11, wherein the at least one facing sheet comprises an absorbent material.

15. The elastomeric composite laminate of Claim 11, wherein the at least one facing sheet comprises an elastomeric material.

16. The elastomeric composite laminate of Claim 11, wherein the at least one facing sheet comprises a fastener material.

17. The elastomeric composite laminate of Claim 11, wherein the base polymer is present in the composition in an amount between about 50% and about 75% by weight.

18. The elastomeric composite laminate of Claim 11, wherein the base polymer comprises at least one of the group consisting of polystyrene-polyethylene-polypropylene-polystyrene (SEPS) block copolymer, styrene-isoprene-styrene (SIS) block copolymer, styrene-butadiene-styrene (SBS) block copolymer, styrene-ethylene-butylene-styrene (SEBS) block copolymer, ethylene-propylene-diene (EPDM) copolymers, thermoplastic polyurethane, and combinations thereof.

19. The elastomeric composite laminate of Claim 11, wherein the high softening point tackifier is present in the composition in an amount between about 20% and about 40% by weight.

20. The elastomeric composite laminate of Claim 11, wherein the high softening point tackifier comprises at least one type of hydrocarbon selected from the group consisting of petroleum distillates, rosin, rosin esters, polyterpenes derived from wood, polyterpenes derived from synthetic chemicals, and combinations thereof.

21. The elastomeric composite laminate of Claim 11, further comprising a low softening point additive having a softening point of about 60 degrees Celsius or less and a viscosity of about 1000 cps or less at 182 degrees Celsius, present in an amount between about 0% and about 20% by weight.

22. The elastomeric composite laminate of Claim 11, wherein the composition is formed as at least one of the group consisting of: a plurality of extruded strands, an extruded film, a melt-blown web, a foam, a plurality of beads, and combinations thereof.

23. The elastomeric composite laminate of Claim 11, further comprising:

a garment incorporating the elastomeric composite laminate into a structure of the garment.

24. The elastomeric composite laminate of Claim 23, wherein the garment is one selected from the group consisting of personal care garments, medical garments, and industrial workwear garments.

25. A method of making an elastomeric adhesive composition, comprising the steps of:

forming a solid phase composition of a base polymer and a high softening point tackifier resin having a softening point of about 80 degrees Celsius or greater and a viscosity of about 1500 cps or greater at 182 degrees Celsius;

forming a liquid phase composition by heating the solid phase composition to a temperature of about 191 degrees Celsius or lower;

achieving a viscosity of the liquid phase composition between about 100,000 and about 500,000 cps at between about 149 and about 177 degrees Celsius; and

forming an elastomeric adhesive composition by extruding the liquid phase composition through hot-melt equipment.

26. The method of Claim 25, further comprising the step of forming a film by extruding the liquid phase composition through hot-melt equipment onto a chill roll

27. The method of Claim 26, further comprising self-adhering the film to at least one facing sheet to form an elastomeric composite laminate.

28. The method of Claim 27, further comprising adjusting an add-on level of the liquid phase composition to vary tension in the elastomeric composite laminate.

29. The method of Claim 27, further comprising adjusting a stretch ratio of the film to vary tension in the elastomeric composite laminate.

30. The method of Claim 26, comprising forming the film into a plurality of extruded strands.

31. The method of Claim 26, wherein the liquid phase composition is extruded through a die onto the chill roll, wherein the die is selected from the group consisting of a slot coat die, an extrusion die, a melt-blown die, and a strand die.

32. The method of Claim 31, comprising stretching the film at an output of between about 50 and about 120 grams per square meter before stretching, from the die.

33. The method of Claim 25, further comprising the step of applying the elastomeric adhesive composition to a facing material.

34. The method of Claim 33, wherein the facing material is selected from the group consisting of a nonwoven web, a film, an elastomeric material, a fastener material, and combinations thereof.

35. The method of Claim 25, further comprising the step of applying the elastomeric adhesive composition to an absorbent material to form an elastomeric absorbent composite.

36. The method of Claim 25, wherein the hot-melt equipment comprises a drum unloader capable of handling material having a viscosity up to about 2,000,000 centipoise.

37. The method of Claim 25, wherein the hot-melt equipment comprises an extruder capable of handling material having a viscosity up to about 2,000,000 centipoise.